"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.P.; GRIGOR'YEV, S.B.

Time dependence of the establishment of equilibrium magnetization of a nuclear spin system under the action of ultrasound. Fiz. tver. tela 7 no.5:1389-1392 My '65. (MIRA18:5)

1. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova (Lenina).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.M., inzhener.

Unit laying of track on reinforced concrete ties (From "Revue générale des Chemins de fer" N 1953). Transp.stroi. 6 no.6:26-27 Je '56. (Railroads--Track) (MLRA 9:9)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.M., inzh.

Unit for lifting and straightening railroad tracks. Transp. stroi. 10 no.1:58-59 Ja '60. (MIRA 13:6)
(Railroads--Track--Maintenance and repair)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.M., inzh.

Grid road rollers. Transp.stroi. 11 no.3:55-56 Mr '61.
(MIRA 14:3)
(Road rollers)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.M., inzh.

Laying continuous track in the United States. Transp.stroi. 11 no.4:56-57 Ap '61. (MIRA 14:5)
(United States--Railroads--Track)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.M.

Techniques for stabilizing magnetic fields. Geofiz. prib. no.16: 78-93 '63. (MIRA 17:10)

1. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova (Lenina).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.N., inzh., otvetstvennyy red.; TIL'TIN, G.K., inzh., red.; BHISKINA, A.I., inzh., red.; KALMYKOV, N.V., inzh., red.; KUTIKOVA, A.I., inzh., red.; GALANOV, I.G., inzh., red.; STEL'MAKH, A.N., red. izd-va; SHKLYAR, S.Ya., tekhn. red.

[Rules for organization and safe operation of gas producer stations operated on peat] Pravila ustroistva i bezopasnoi ekspluatatsii torfianykh gazogeneratornykh stantsii. Moskva, Ugletekhizdat, 1957. 34 p. (MIRA 11:7)

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Peat) (Gas producers)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.P.

Protecting corn against wireworms. Zashch. rast. ot vred. i bol. 7 no.3:39-40 Mr '62. (MIRA 15:11)

1. Pushkinskaya baza Vsesoyuznogo instituta zashchity rasteniy.
(Corn (Maize)--Diseases and pests)
(Wireworms--Extermination)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.S.

SOV/133-59-2-3/26

AUTHORS: Gorbunov, P.A.,
Sazonov, A.S.

TITLE: Experience in Operation of a Covered Stock Yard for Ore Fines (Opyt raboty zakrytogo sklada rudnoy melochi)

PERIODICAL: Stal', 1959, Nr 2, pp 106-109 (USSR)

ABSTRACT: The practice adopted for the preparation of ore fines for sintering on No.1 MMK sinter plant in which a covered stock yard of 25,000 tons capacity is used for a preliminary averaging of the chemical composition of ore fines and concentrates is described and illustrated. It is shown that by a correct stock yard practice the range of variation in the chemical composition of ore fines can be reduced 3-4 times. There are 2 tables and 7 figures.

ASSOCIATION: Magnitogorskiy Metallurgicheskiy Kombinat (Magnitogorsk Metallurgical Combine)

Card 1/1

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.V.

Kharkov Institute of Mining Engineering on the 40th anniversary of the Great October Socialist Revolution. Nauch. trudy KHGI no.6:3-13 '58. (MIRA 14:4)
(Kharkov--Mining engineering--Study and teaching)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A. Ye.

Universal echo depth sounder. Mor.flot 19 no.4:42 Ap '59.
(MIRA 12:6)

1. Nachal'nik nauchno-issledovatel'skogo sektora Leningradskogo vysshego inzhenernogo morskogo uchilishcha im. admirala Makarova.
(Sonar)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

VIPPER, A.B.; LEONT'YEV, B.I.; SAZONOV, A.Ye.

Dispersity of impurities in oil in the course of centrifugal purification. Khim.i tekh.topl.i masel 6 no.3:60-62 Mr '61. (MIRA 14:3)

(Lubrication and lubricants)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

34975
S/080/62/035/002/015/022
D258/D302

11.0132

AUTHORS: Chertkov, Ya. B., Leont'yev, B. I., Shchagin, V. M. and Sazonov, A. Ye.

TITLE: Electron microscope investigation of changes occurring during the heating of S-containing compounds dissolved in middle fractions of Volga-region petroleum fuels

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 2, 1962, 394-397

TEXT: The authors studied the formation of a solid phase as the result of heating middle cuts of petroleum fuels rich in organic S compounds. This was done to investigate the thermal stability of such fuels. Samples of a standard fuel TC-1 (TS-1) were desulphurized and then treated with the individual mercaptans, sulphides, disulphides, thiophanes and thiophenes, normally found in Volga-region fuels, and also with sulphur-rich concentrates isolated from the latter. The compounds were added in quantities equivalent to up to 0.01% of mercaptanic S and up to 0.25% S for the rest. The solutions were examined under an electron microscope for the pre-

Card 1/2

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Electron microscope investigation...

sence of solid particles, before and after heating in an autoclave at 120, 150, 200 and 250°C. It was shown that all compounds yielded initially true solutions which formed colloidal systems on heating. Solid particles were formed next. The particle size was greatly increased by raising both temperature and S-concentration. The biggest aggregates were formed with sulphides (at 150 - 200°C), thiophanes (at 200°C) and disulphides (at 150 - 200°C), while solutions of thiophenes remained stable even after heating at 250°C. There are 1 table and 10 references: 7 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: E. M. Shelton, C. M. McKinney and O. C. Blade, Petrol. Refiner, 36, 5, 257, (1957); R. B. Thompson, L. W. Druge and J. A. Chenicek, Ind. Eng. Ch., 41, 12, 2615 (1949); C. M. Barringer, M. W. Corsilius and J. D. Rogers, Petrol Processing, 12, 1909, (1955).

SUBMITTED: March 13, 1961

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

PASS, Anatoliy Yegorovich; SAZONOV, A.Ye., doktor tekhn. nauk, retsenzent; POTEMKIN, A.E., kand. fiz.-mat. nauk, red.

[Electronics and radio systems of ships] Sudovaia elektronika i radiotekhnika. Moskva, Transport, 1964. 207 p. (MIRA 17:9)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A. Ye.

SAZONOV, A. Ye "Some Problems in the Performance of Hydrographic Work in Hydraulic-Engineering Prospecting." Min Maritime Fleet USSR. Leningrad Higher Engineering Maritime School imeni Admiral S. O. Makarov. Leningrad, 1956. (Dissertation for the Degree of Candidate in Sciences)

TECHNICAL

So: Knizhnava Letopis', No. 17, 1956

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, Anatoliy Yefimovich; NIKIFOROV, Yu.F., inzh., spetsred.; DENISOV, K.N., inzh., red.izd-va; KOTLYAKOVA, O.I., tekhn.red.

[Electronic digital computers and their use on ocean-going vessels] Elektronnye tsifrovye vychislitel'nye mashiny i ikh ispol'zovanie na morskikh sudakh. Leningrad, Izd-vo "Morskoi transport," 1960. 107 p. (MIRA 13:5)

(Electronic digital computers)
(Electronics in navigation)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

S/196/62/000/010/035/035
E194/E155

AUTHOR: Sazonov, A.Ye.

TITLE: The prospects of using digital computers aboard ship

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.10, 1962, 17-18, abstract 10 L88. (In the Symposium 'Primeneniye vychisl. tekhn. dlya avtomatiz. proiz-va' (The Application of Computer Techniques to the Automation of Production), M., Mashgiz, 1961, 279-285).

TEXT: Ships employ many control and automatic control instruments and systems and so it is necessary to develop ship automation systems with a single control centre using high-speed digital computers. Such equipment should automatically pick up and transform data from the log, the gyro-compass, the indicator equipment, the navigational systems and radar, and automatically introduce the data to the computer; it should steer the ship according to a predetermined programme, should permit manual introduction of the data to the computer and should also be able to print solutions. The following requirements apply to the computer: 1) In calculating the ship's position to an accuracy

Card 1/4

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

The prospects of using digital ...

of 0'.1 it should have a 27-element arithmetical device and 24-element memory device. 2) It should record the ship's position at least once every two minutes and should then solve more complicated problems and print the results on tape. High-speed machines should be used of 8000-10 000 operations per sec. 3) The size of the equipment should be as small as possible so that it can be located in the wheelhouse.4)The machine components should operate reliably in the temperature range of -40 to +50 °C. 5) The equipment must be reliable in operation. Service maintenance should be of a preventive nature. The equipment should be designed to permit rapid replacement of units. A specially formulated control problem should be used to provide effective checking of the operation of the machine. The machine should notice errors in the solution, should determine their cause and provide a corresponding signal. 6) The equipment should make ship's operation more efficient and optimise the navigation process. Use of the equipment aboard ship should reduce the number of the crew but will require of the officers and engineers greater knowledge in the fields of automation,

Card 2/4

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

electronics, and computer techniques. To fulfil these requirements the machine should carry out the following fundamental commands: addition, subtraction, multiplication, conditional and unconditional changeover, and should also draw up a collection of standard sub-programmes. On the basis of these requirements it is possible to formulate both the block diagram of a shipboard computer and the principal ways of developing it. The computer should have the following main units: an arithmetical unit which performs arithmetical and logical operations; a memory unit which should store a number of problem constants, also variable 'constants' (which depend on the year or month), initial data, intermediate results and final solutions; units for introducing and producing data, the data being introduced from a control board with simultaneous indication of the numbers introduced (using a memory unit); a unit for introducing data from the convertor to convert continuous functions (voltage or angle) into discrete and vice-versa. The central machine control unit should synchronise and

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The prospects of using digital ... S/196/62/000/010/035/035
E194/E155

control the operation of all the units of the machine and should automatically fulfil the programme commands.
2 illustrations.

[Abstractor's note: Complete translation.]

Card 4/4

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

ANTOMONOV, Yuriy Gur'yevich; SAZONOV, A.Ye., dotsent, retsenzent; FATEYEV, A.V., prof., retsenzent; OLEYNIKOV, V.A., nauchnyy red.; NIKITINA, M.I., red.; FRUMKIN, P.S., tekhn. red.

[Automatic control systems using electronic calculating machines; synthesis of systems optimum in high-speed operation] Avtomaticheskoe upravlenie s primeneniem vychislitel'nykh mashin; sintez sistem, optimal'nykh po b strodeistviiu. Leningrad, Sudpromgiz, 1962. 339 p. (MIRA 15:5)

(Automatic control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.Ye., kand.tekhn.nauk; FILIPPOV, Yu.M., kand.tekhn.nauk

Strictly consecutive increase in accuracy of a calculated position of a ship in the case of simultaneous position lines. Sudovozhdenie no.2:65-69 '62. (MIRA 17:4)

1. Nauchno-issledovatel'skiy sektor Leningradskogo vysshego inzhenernogo morskogo uchilishcha im. admirala Makarova (for Sazonov). 2. Kafedra vysshey matematiki Leningradskogo vysshego inzhenernogo morskogo uchilishcha im. admirala Makarova (for Filippov).

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAVINOV, A.Ye., starshiy nauchnyy sotrudnik, doktor tekhn.nauk;
PTITSYN, Yu.M., ispolnyayushchiy obyazannosti dotsent, kand.tekhn.nauk

Strictly consecutive verification of the accuracy of the calculated position of a ship in the case of position lines determined at various times. Sudovozhdenie no.3:6-19 '63. (MIRA 17:5)

1. Leningradskoye vysshaye inzhenernoye morskoye uchilishche imeni admirala Makarova.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, Anatoliy Yefimovich, doktor tekhn. nauk; FILIPPOV, Yuriy Markovich, kand. tekhn. nauk. Prinimali uchastiye: BREKHOV, A.M., inzh.; ANTONOV, Yu.G., kand. tekhn. nauk; DENISOV, K.N., kand. tekhn. nauk; MESHKOV, O.I., red.

[Mathematical principles of the automation of ship navigation] Matematicheskie osnovy avtomatizatsii sudovozhdeniia. Moskva, Izd-vo "Transport," 1964. 175 p. (MIRA 17:5)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, A.Z.

Two algorithms for solving large systems of normal equations. Trudy TSNIIGAIK no.147:3-15 '62. (MIRA 15:9)
(Equations)
(Programming (Electronic computers))

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

GUBANOV, A.I.; SAZONOV, B.F.

Analyzing the development of the Kalinovka-Novostepanovka field.
Trudy Giprovostoknefti no.1:172-190 '58. (MIRA 13:9)
(Kuybyshev Province--Oil fields--Production methods)
(Orenburg Province--Oil fields--Production methods)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

GUBANOV, A.I.; SAZONOV, B.F.

Hydrodynamic investigation of petroleum beds of the Zol'noye, Mukhanovo, and Krasnyy Yar deposits in Kuybyshev Province. Trudy VNII no.29:258-265 '60. (MIRA 13:10)

1. Giprovostokneft'.
(Kuybyshev Province—Oil reservoir engineering)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

ASHIROV, K.B.; GUBANOV, A.I.; SAZONOV, B.F.; SOKHACHEVSKAYA, I.A.

Geology and oil potential of the Krasnyy IAr oil field and conditions of its development. Trudy Giprovostoknefti no.3:146-164 '61. (MIRA 14:12)

(Volga Valley--Petroleum geology)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

ASHIROV, K.B.; GUBANOV, A.I.; ILLARIONOVA, S.Ya.; SAZONOV, B.F.

Geology and development of the layer 1 of the lower Carboniferous in the Mukhanovskoye oil field. Trudy Giv[redacted]vostoknefti no.3:183-189 '61. (MIRA 14:12)
(Kuybyshev Province--Oil reservoir engineering)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

ASHIROV, K.B.; GUBANOV, A.I.; ILLARIONOVA, S.Ya.; SAZONOV, B.F.

Development of oil pools in layers 2,3,4-a, and 4-b of the lower Carboniferous in the Mukhanovskoye field. Trudy Giprovostoknefti no.3:191-204 '61. (MIRA 14:12)
(Kuybyshev Province--Oil fields--Production methods)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SURGUCHEV, Mikhail Leont'yevich; SAZONOV, Boris Fedorovich; KOLGANOV, Venedikt Ivanovich; PETROPOL'SKAYA, N.Ye., red.; DURASOVA, V.M., tekhn. red.

[Effectiveness of modern petroleum production methods]Effektivnost' sovremennykh metodov razrabotki neftianykh zalezhei. Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1962. 91 p. (MIRA 15:7)

(Kuybyshev Province--Oil fields--Production methods)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

GUBANOV, A.I.; KOLGANOV, V.I.; SAZONOV, B.F.; ZHUKOV, D.M.

Effect of forced production on the water encroachment and oil recovery as illustrated by the development of the Iablonovyy Ovrag field. Neft. khoz. 40 no.6:37-42 Je '62. (MIRA 15:6)

(Samara Bend--Oil fields--Production methods)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B.F.

Process of displacing immicible liquids into a system of wells. Trudy Giprovostoknefti no.5:82-88 '62. (MIRA 16:8)

(Oil field flooding)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B.F.

Flooding oil from a nonuniform layer into a system of wells.
Trudy Giprovostoknefti no.5:89-94 '62. (MIRA 16:8)

(Oil field flooding)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B.F.

Effect of the density of the spacing pattern on oil recovery.
Trudy Giprovostoknefti no.5:95-101 '62. (MIRA 16:8)

(Oil reservoir engineering)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

ASHIROV, K.B.; GUBANOV, A.I.; ILLARIONOVA, S.Ya.; SAZONOV, B.F.

Geology and oil potential of the Dmitriyevskoye field and plan for its development. Trudy Giprovostoknefti no.5:222-239 '62. (MIRA 16:8)

(Kinel'-Cherkassy District--Oil reservoir engineering)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B.F.

Effect of maximum water encroachment of oil on the final conformance factor. Neftepron. delo no.9:29-30 '63. (MIRA 17:4)

1. Gosudarstvennyy institut po proyektirovaniyu i issledovatel'skim rabotam neftedobyvayushchey promyshlennosti vostochnykh rayonov strany, Kuybyshev.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B.F.

Effect of well spacing on the ultimate yield of a reservoir.
Neft. khoz. 41 no.7:36-39 Jl '63 (MIRA 17:7)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, Boris Fedorovich, kand. tekhn. nauk; PETROPOL'SKAYA, N.Ye., red.

[Oil-field flood operations] Razrabotka neftianykh zalezhei s primeneniem zavodneniia. Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1964. 74 p. (MIRA 18:6)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

KOVALEV, V.S.; CAZONOV, B.F.

Taking into consideration the nonuniformity of a bed with respect to permeability, porosity, oil saturation, and drive completion in calculating the drowning and oil production of producing beds. Nauch.-tekh. sbor. po dob. nefti no.25:82-86 '64. (MIRA 17:12)

1. Gosudarstvennyy vsesoyuznyy issledovatel'skiy i proyektnyy institut neftyanoy promyshlennosti.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

KOLGANOV, Venedikt Ivanovich; SURGUCHEV, Mikhail Leont'yevich; SAZONOV, Boris Fedorovich

[Flooding of oil wells and beds] Obvodnenie neftianykh skvazhin i plastov. Moskva, Nedra, 1965. 262 p. (MIRA 18:2)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B. G.

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BOOK Call No.: TN672.V8

Author: MALISHEV, K. A., SADOVSKIY, V. D. and SAZONOV, B. G.

Full Title: OVERCRYSTALLIZATION OF AUSTENITE CAUSED BY INNER HARDENING

Transliterated Title: Rekristallizatsiya austenita, obuslovlennaya vnutrannim naklepom

Publishing Data

Originating Agency: All-Union Scientific Engineering and Technical Society of Machine Builders. Urals Branch

Publishing House: State Scientific and Technical Publishing House of Machine Building Literature ("Mashgiz")

Date: 1950 No. pp.: 6 No. of copies: 3,000

Text Data

This is an article from the book: VSESOYUZNOYE NAUCHNOYE INZHENERNOTEKHNICHESKOYE OBSHCHESTVO MASHINOSTROITELEY. URAL'SKOYE OTDELENIYE, THERMAL TREATMENT OF METALS - Symposium of Conference (Termicheskaya obrabotka metallov, materialy konferentsii) (p. 138-143) see AID 223-II

Coverage: Phase transformation of austenite in the anisotropic medium is discussed. The form and orientation of crystals of the new phase are found to be dependent upon vectorial characteristics of the medium. As a result of the orientating of the transformation of γ-α, each monocrystallic grain of austenite at cooling is transformed into an orderly crystallographic complex

1/3

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SAZONOV, B. G.

B. G. Sazonov and V. D. Sadovskii. The influence of the rate of heating on the position of critical points in the heating of steel. P. 693.

Institute of Physics of Metals
Ural Branch of Academy of Sciences, USSR
April 9, 1951

SO: Journal of Technical Physics, Vol. XXI, No. 6, June 1951

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SAZONOV, B. G.

USSR/Metallurgy - Recrystallization 1 Jan 51

"Recrystallization of Austenite Depending on Cold Hardening," K. A. Malyshev, V. D. Sadovskiy, B. G. Sazonov, Inst Phys of Metals, Ural Affiliate, Acad Sci USSR

"Dok Ak Nuak SSSR" Vol LXXVI, No 1, pp 61-64

Austenite, which forms while heating steel above critical points, undergoes int hardening which produces recrystn and the usually following growth of grain.

178T79

Translation B-80363, 16 Nov 54

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SADOVSKIY, V.D.; MALYSHEV, K.A.; SAZONOV, B.G.

Structural mechanism of phase transformation in rapid heating of steel. [Izdaniia] LONITOMASH no.30:55-69 '52. (MLRA 8:1)
(Steel--Heat treatment)

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SAZONOV, B.G.; SADOVSKIY, V.D.

Effect of heating speed upon the position of critical points of steel. [Izdaniia] LONITOMASH no.30:241-252 '52. (MLRA 8:1)
(Steel--Heat treatment)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B.G.

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Metallurgy and Metallography

(4)

Chernov's *b* point. V. D. Sadovskii, K. A. Malyshev, and B. G. Sazonov. *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 1953, 68-81.—Historical discussion of the work on metallography of iron by Chernov (*Zhur. Russ. Met. Obshchestva* 1916, No. 3-4; originally reported in 1868) and an explanation of his definitions of *a* and *b* points in the Fe phase diagram. 29 references.

G. M. Kosolapoff

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B. G. SAZONOV

Journal of the Iron and Steel Inst.
June 1954
Metallography

6

The influence of Rate of Heating on the Recrystallization of Steel. B. G. Sazonov. (*Doklady Akademii Nauk S.S.S.R.*, 1953, 93, (5), 817–820).—[In Russian]. Samples of steel (C 0·41%, Cr 1·41%, Ni 0·03%) quenched from 1300° C. in oil were heated in the temperature range 700–1200° C. at heating rates of 3° and 200° C./min. and quenched in water. The microstructure of samples fractured in liquid nitrogen was studied. It was found that at low and very high heating rates the austenite is regularly orientated, at intermediate heating rates austenite is mainly unorientated in relation to the initial state.—V. G.

Inst. Physics of Metals, Ural affil; AS USSR
Evaluation: B-81595, 28 Dec 54

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SAZONOV, B.G.

SADOVSKIY, V.D.; MALYSHEV, K.A.; SAZONOV, B.G.; SHEVYAKINA, L.Ye., redaktor; LUCHKO, Yu.V., redaktor; KOVALENKO, N.I., tekhnicheskiy redaktor.

[Phase and structure changes during the heating of steel] Fazovye i strukturnye prevrashcheniia pri nagreve stali. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1954. 183 p. (Metallography) (Steel--Heat treatment) (MLRA 8:1)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

SAZONOV, B. G., SADOVSKIY, V. D., and MALYSHEV, K. A.

"On Methods of Pulverizing the Grain of Cast Alloy Steel by Heat Treatment." From the book, "Heat Treatment and Properties of Cast Steel." edited by N. S. Kreshchanovskiy, Mashgiz, Moscow, 1955.

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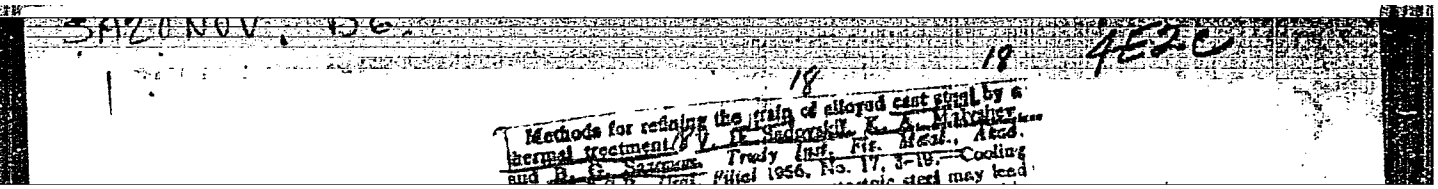

SAZ(NOV. 1956)

18

18 4520

Methods for refining the grain of eutectoid cast steel by a thermal treatment (B.V. Il'inskiy, K.A. Malakhov, and B.G. Sazonov. *Trudy Inst. Fiz. Metal.*, Akad. Filial 1956, No. 17, 3-19.—Cooling steel may lead

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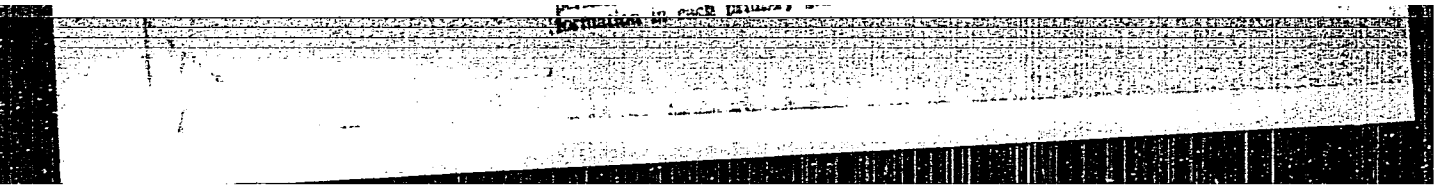

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SADOVSKII, V.P.; MALYSHEV, K.A.; SAZONOV, B.G. 4E2C

cryst. at the same time. With a moderate cooling rate each austenitic grain is broken into a no. of primary areas, the individuality of grains of the original structure is lost to a great extent, and the fracture appearance is detd. by the size of pearlitic colonies. On cooling, an acicular structure of the decompn. products results and the situation is basically changed. Crystallographically oriented transformation mechanism induces an intracryst. texture uniting α-crystallites of the original grain into a single pseudocryst. complex, a pseudograin, which inherits the size, shape, and, to some extent, the orientation of the primary grain. Coarse fracture of cast steel depends on the creation and retention above the crit. point of the secondary intragranular structure, i.e., crystallographic orientation of the primary austenitic grains persisting in spite of allotropic transformations above the A_1–A_3 points. Its elimination is connected with the recrystn. of the already formed austenite well above the A_1–A_3 points, i.e., around 1000–1100°, caused by internal stresses in the new austenitic grains produced by volumetric changes of the α–γ transformation. Their formation depends, with the same compn. and original structure, on the rate of heating. Samples of C 0.4, Cr 1.5, & 1.5% steel oil quenched from 1300°, reheated to 920°, and either furnace cooled or oil quenched showed a coarsely cryst. fracture when the heating rate to 920° was 300°/sec. or 2–3°/min., and very fine fracture when the heating rate of 150–200°/min. was employed, fracturing being done at −196°. The new scheme

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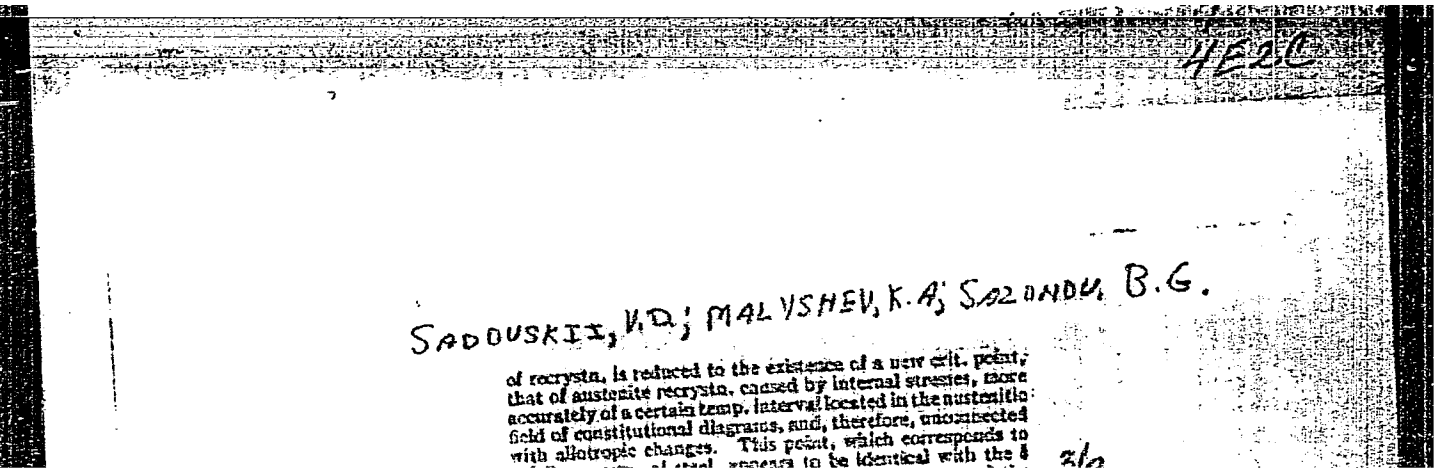

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SADOUSKII, V.D.; MALYSHEV, K.A.; SAZONOV, B.G.

of recrysta. is reduced to the existence of a new crit. point, that of austenite recrysta. caused by internal stresses, more accurately of a certain temp. interval located in the austenitic field of constitutional diagrams, and, therefore, unconnected with allotropic changes. This point, which corresponds to

2/2

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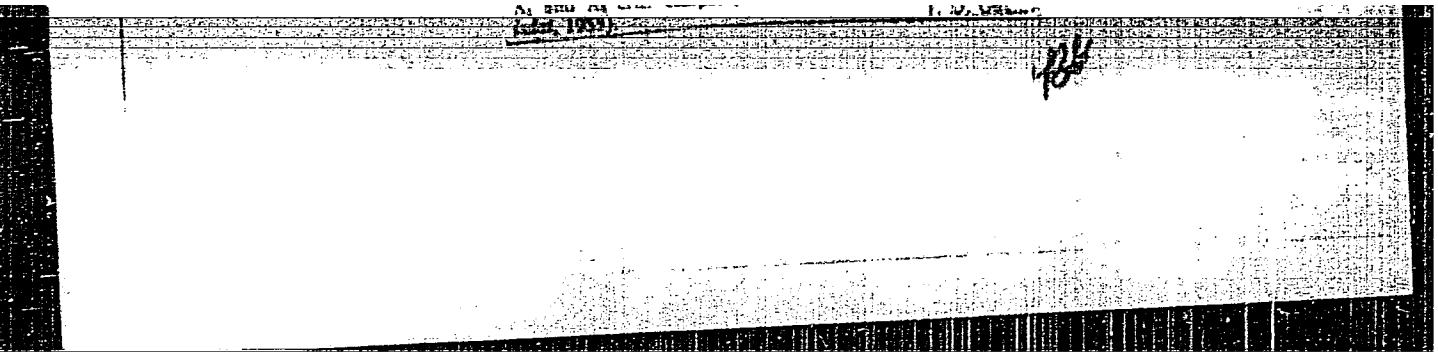

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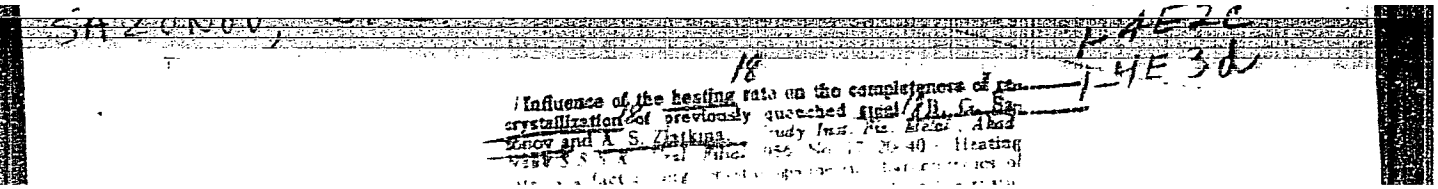

18

Influence of the heating rate on the completeness of re-
crystallization of previously quenched steel / [I. G. Sa-
kunov and K. S. Zlatkina] ... Study Inst. Fe. Metal. Akad
Nauk ... 40) - Heating

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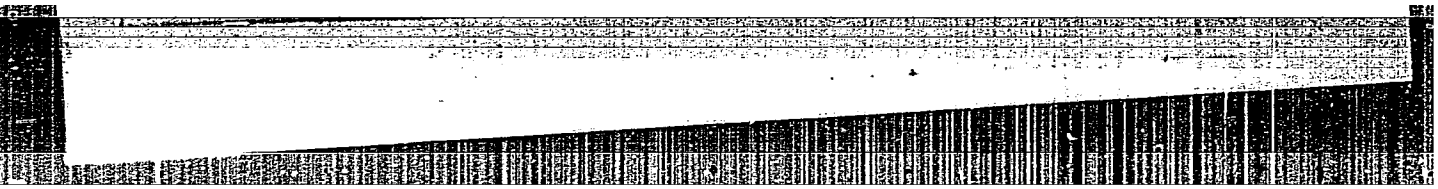

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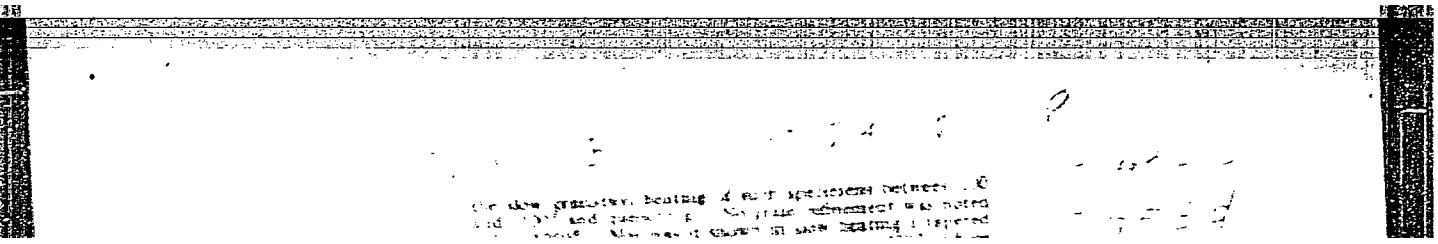

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

AUTHOR: Sazonov, B.G., Candidate of Technical Sciences. 129-4-6/17

TITLE: Influence of a second hardening from the inter-critical range on the tendency of steel to develop reversible temper brittleness. (Vliyanie vtorichnoy zakalki iz mezhkriticheskogo intervala na sklonnost' stali k obratimoy dpusknoy khrupkosti.)

PERIODICAL: "Metallovedenie i Obrabotka Metallov" (Metallurgy and Metal Treatment) 1957, No. 4, pp. 30 - 34 (U.S.S.R.)

ABSTRACT: The influence was investigated of the heat treatment on the tendency of structural alloy (Cr-Si-Mn) steel (0.30-0.40% C, 1.10-1.40% Si, 0.80-1.10% Mn, 1.10-1.40% Cr, 0.40% max Ni) to develop reversible temper brittleness and the influence was studied of the preliminary treatment and of the hardening temperature. Two basic states were applied, namely: hardening from 930 °C followed by a high temperature tempering at 650 °C and annealing at 930 °C. The notch impact specimens were heat-treated as mentioned above and then heated in a furnace at a speed of 2 °C/min to 700 to 1 000 °C (in steps of 50 °C) from which temperature they were hardened in oil and subjected to four hour tempering at 550 °C. The obtained results are plotted in a number of graphs giving also photos of the fractures and a microphoto. On the basis of these it is concluded that structural steel subjected to preliminary normal hardening and

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Influence of a second hardening from ... range on the tendency of steel to develop reversible temper brittleness. (Cont.) 129-4-6/17

and a second hardening from the inter-critical temperature range becomes insensitive to reversible temper brittleness.

There are 8 figures and graphs and two Slavic references.

ASSOCIATION: Ural Branch of the Ac.Sc., U.S.S.R. (Uralskiy Filial AN SSSR).

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Card 2/2

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SOV/126-7-2-30/39

18(3), 18(7), 24(2)
AUTHORS: Grigorov, K.V., Malyshev, K.A., Mironov, L.V., Rodigin, N.M. and Sazonov, B.G.

TITLE: On the Influence of the Speed of Heating on the Recrystallization Texture of Transformer Steel (O vliyanii skorosti nagreva na teksturu rekristallizatsii transformatornoy stali)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1959, Vol 7, Nr 2, pp 305-306 (USSR)

ABSTRACT: In conjunction with the development of a method of heat treatment of moving steel strip by induction heating, the authors of this paper investigated the kinetics of the processes taking place during rapid heating of cold-rolled strip of various grades: carbon, dynamo, transformer and stainless steels. It was established that re-crystallization and grain growth proceed at a very high speed. Thus, for instance, it is possible to effect recrystallization in less than 0.12 sec, including the heating time. This permits electric annealing of cold-rolled strip of the above mentioned grades, with the exception of transformer steel, at very high speeds

Card 1/5

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On the Influence of the Speed of Heating on the Recrystallization Texture of Transformer Steel

and short time durations, ensuring thereby all the properties specified by the GOST specifications. For cold-rolled transformer steel, the authors studied additionally the influence of the speed of heating on the degree of perfection of the texture and it is to this problem that the present paper is devoted. The investigations were carried out on industrially produced 0.5 and 0.35 mm thick strip with a Si content of 3.0 to 3.2%, produced by cold-rolling twice with an intermediate anneal at 800 to 850°C, whereby the relative reduction during each pass amounted to 50-60%. For the investigations the specimens were taken from melts intended for finished products with greatly differing properties. Heating of the specimens to 1000-1300°C was effected in an ordinary furnace and in a salt bath with various heating durations between 1 sec and 15 mins and also by direct passage of electric currents through the specimen. In all cases the specimens were cooled in air after heating. The heating speed varied between 1°C/min and 1000°C/sec. On the

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On the Influence of the Speed of Heating on the Recrystallization Texture of Transformer Steel

basis of the obtained results the following conclusions were arrived at:

1. With increasing heating speed a continuous decrease occurs in the degree of perfection of the texture obtained at the respective temperatures. Holding at the respective heating temperature brings about a slight improvement of the degree of perfection of the texture. On heating with a speed of the order of 1°C/min, the degree of perfection of the texture reaches 95%, whilst on heating at a speed of 300 to 1000°C/sec it does not exceed 25-30%. The heating speed does not influence the type of texture: at all heating regimes the texture is characterized by the predominance of the orientation {110} and <001>.

2. On heating at a speed of 300-1000°C/sec up to temperatures of 1000-1300°C, the grains grow to dimensions which are commensurate with the thickness of the sheet, consequently an increased heating speed does not suppress the grain growth generally but only the preferential

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On the Influence of the Speed of Heating on the Recrystallization Texture of Transformer Steel

growth of grains which are orientated in a certain way. 3. What was said in paragraph 1 relates to melts which, under industrial conditions, yield a perfect structure and favourable magnetic properties. In specimens obtained from heats which yield poor magnetic properties, a relatively low degree of perfection of the texture is obtained for all heating regimes which, in the best case, does not exceed 50%; the type of texture of the specimens from heats of this group is also characterized by the fact that the predominant orientation of the grains is $\{110\}\langle 001\rangle$. As regards the processes of texture formation, slow heating of specimens obtained from such heats provides only insignificant advantages as compared to rapid heating. The problem of the influence of the speed of heating on the formation of recrystallization textures of cold-rolled materials has so far not been elucidated in literature. Assmus et al. (Ref 1) published certain data on the kinetics of the process of texture formation at various temperatures. Indirectly the results of these authors

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On the Influence of the Speed of Heating on the Recrystallization Texture of Transformer Steel

are in agreement with the results given in this paper. There is one German reference.

(Note: This is a complete translation)

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Metal Physics, Ac.Sc., USSR)

SUBMITTED: March 22, 1958

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SAZONOV, B.G.

PHASE I BOOK EXPLOITATION SOV/5511

Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Kiyevskoye oblastnoye pravleniye.

Metallovedeniye i termicheskaya obrabotka (Physical Metallurgy and Heat Treatment of Metals) Moscow, Mashgiz, 1961. 330 p. Errata slip inserted. 5,000 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov UkrSSR. Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Kiyevskoye oblastnoye pravleniye.

Editorial Board: N. P. Braun, Doctor of Technical Sciences, I. Ya. Dekhtyar; Doctor of Technical Sciences, D. A. Drayfor, Doctor of Technical Sciences, I. S. Kamenichnyye, Engineer, Ye. A. Markovskiy, Candidate of Technical Sciences, V. G. Pomyakov, Doctor of Technical Sciences, and A. V. Chernovol, Candidate of Technical Sciences; Ed.: M. S. Soroka; Tech. Ed.: M. S. Gorncatayopol'skaya; Chief Ed., Mashgiz (Southern Dept.): V. K. Serdyuk, Engineer.

Card 1/10

PURPOSE: This collection of articles is intended for scientific workers and technical personnel of research institutes, plants, and schools of higher technical education.

COVERAGE: The collection contains papers presented at a convention held in Kiyev on problems of physical metallurgy and methods of the heat treatment of metals applied in the machine industry. Phase transformations in metals and alloys are discussed, and results of investigations conducted to ascertain the effect of heat treatment on the quality of metal are analyzed. The possibility of obtaining metals with given mechanical properties is discussed, as are problems of steel brittleness. The collection includes papers dealing with kinetics of transformation, heat treatment, and properties of cast iron. No personalities are mentioned. Articles are accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

Stregulin, A. I., Engineer, and L. A. Melnikov (Sverdlovsk). Transformation of Austenite Into Martensite Under High Pressure 12

Brusilovskiy, B. A., Engineer, and P. I. Ivanov (Kramatorsk). X-Ray Investigation of the Decomposition Kinetics of Martensite in Tempering at Low Temperature 19

Kocherzhinskiy, Yu. A., Candidate of Technical Sciences (Kiyev). Conditions of Formation of Metastable Austenite in Iron-Carbon Alloys 22

Mirovskiy, E. I., Engineer (Kiyev). The Nature of the Phase Transformation of Carbon Steels 34

Card 3/10

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

Kauzlin, Ya. R., Engineer (Moscow). On the Nature of the Critical Degree of Strain 44

Sadovskiy, V. D., Engineer, and O. N. Bogacheva (Sverdlovsk). On the Problem of the Phase Recrystallization of the G13L Cast Steel 54

Fermyakov, V. G., Engineer, and M. V. Belous (Kiyev). The Changes in the Carbide Phase During the Tempering of Carbon, Silicon, and Aluminum Steels 62

Cherepin, V. T., Candidate of Technical Sciences (Kiyev). Tempering of Carbon Steel by Using Electric Heating 75

Golovan', N. A., Engineer (Kiyev). Concentration of Carbides in a Martensite Needle 85

Baranov, S. M., Doctor of Technical Sciences, Professor (Leningrad). Effect of Silicon Monoxide on the Properties of Steel 92

Sazonov, B. G., Candidate of Technical Sciences (Sverdlovsk). Investigating the Influence of the Heating Rate and the Initial Structure on the Phase Recrystallization of Steel and Recrystallization of Austenite as Stipulated by the Phase-Hardening Effect 97

L'vov, G. K., Engineer (Kiyev). Basic Principles of Rapid Recrystallization of Low-Carbon Steel 106

Larikov, L. N., Engineer (Kiyev). Investigating the Effect of Aluminum and Chromium Additions on the Recrystallization Kinetics of α-Iron 114

Sokol, A. N., Candidate of Technical Sciences, O. S. Kostyrko, Engineer, E. I. Mirovskiy, B. B. Vinokur, and M. P. Braun, Doctor of Technical Sciences, Professor (Kiyev). Plasticity of Steels Within the Pressworking Temperature Range 121

Vinokur, B. B., Engineer, E. I. Mirovskiy (Kiyev) and A. L. Geller (Kramatorsk). Effect of the Increase of Forging

Temperature on the Mechanical Properties of Large Forgings 127

Braynin, I. Ye., Doctor of Technical Sciences, Professor (Stalino), V. A. Kharchenko, Engineer and A. I. Kondrashev (Kramatorsk). Experimental Investigation of Stress Distribution in the Cross Section of a Bent Billet as Related to Flaking 132

Baranov, S. M. (Leningrad). Hydrogen as a Surface-Active Admixture in Alloys 138

Kostyrko, O. S., Engineer (Kiyev). Flakes in Steel 146

Mirovskiy, E. I., Engineer, A. L. Geller (Kramatorsk), B. B. Vinokur, and M. P. Braun (Kiyev). The Effect of the Duration of Heating Before Forging on the Ductility of Steel 152

Gavranek, V. V., Engineer, and D. N. Dol'shutkin (Kharkov). Mechanism of the Cavitation Erosion of Metals 157

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

BUTAKOV, Dmitriy Konstantinovich; SAZONOV, B.G., kand. tekhn. nauk, retsenzent; GOL'DSHTEYN, M.I., kand. tekhn.nauk, red.; DUGINA, N.A., tekhn. red.

[Technological principles of improving the quality of alloyed steel for castings] Tekhnologicheskie osnovy povysheniia kachestva legirovannoi stali dlia otlivok. Moskva, Mashgiz, 1963. 191 p. (MIRA 16:5)
(Founding--Quality control)
(Steel alloys--Metallurgy)

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33248
S/531/61/000/111/002/004
D051/D113

3.5140 (also 1041)

AUTHOR: Sazonov, B.I.

TITLE: On the relationship between solar corpuscular streams and the type of upper baric field of the troposphere

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no.111, 1961. Voprosy obshchey i sinopticheskoy klimatologii, pp 126-135

TEXT: New data on the relationship between solar corpuscular streams and tropospheric circulation are given, reference being made to Soviet and foreign literature. The author bases his investigations on the assumption that if a baric formation is due to solar activity, the regions of its most pronounced frequency will be symmetrically arranged in respect to the meridian (70° west.long. and 110° east.long.) which combines the geographic and geomagnetic poles of the Earth. Since some scientists recently observed that the genesis of high and warm anticyclones is the most probable reaction of the atmosphere to solar corpuscular action, the author first examined the distribution of the centers of high anticyclones above the

Card 1/4

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On the relationship ...

northern hemisphere. From daily AT_{500} upper-air charts (published in the TsIP bulletins) a map was compiled, showing this distribution for the winter season from 1949 to 1958. This map reveals that the points of increased frequency of anticyclogenesis are circularly arranged with Greenland, Canada, and the North-West Atlantic as their center. The data obtained confirm other authors' conclusions on the relationship between corpuscular invasions and anticyclogenesis in the free atmosphere, and help clarify the distribution of this phenomenon. A comparative study was carried out between the obtained circular zone of increased anticyclogenesis and the zone of maximum frequency of aurora polaris, plotted by H.Fritz in 1881 for the winter season. It was found that the second zone is somewhat larger than the first and displaced towards America along the mentioned meridians. A direct relationship between these phenomena could not be established. A map of anticyclone frequency was also compiled for the summer season, which was essentially similar to the first map. In order to verify the real existence of the circular high pressure zone on upper-air charts, the author further plotted a map on the basis of AT_{200} charts for the winter seasons 1954-55 and 1958-59. The map shows isolines of equal

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On the relationship ...

upper-air crest frequencies and regions of maximum frequency of upper-air crests. It confirms that the zone of increased frequency of anticyclogenesis was correctly drawn. According to the author, it can be assumed that the genesis of a high anticyclone and an upper-air crest is to the same degree accounted for by corpuscular streams. Discussing upper-air climatic crests, the author considers that problems connected with them can be resolved by assuming that a stimulating process connected with corpuscular invasion occurs in the genesis of upper-air cyclones. The remainder of the article deals with the solution of the basic problem of upper-air baric change under the effect of corpuscular radiation. The importance of further study of the upper atmosphere for weather forecasting is stressed. Soviet scientists M.S.Eygenson, A.A. Girs, M.I.Morozova, and M.A. Petrosyants are mentioned. There are 3 figures and 18 references: 7 Soviet and 11 non-Soviet-bloc. The four most recent English-language references are: T. Asakura and A. Katayama. On the Relation Between Solar Activity and General Circulation in the Atmosphere. Papers on Meteorol. and Geoph., vol. IX, No 1, Tokyo, 1958; Wan Chen-Chin. The observed mean monthly wind fields in the lower stratosphere and upper troposphere over

Card 3/4

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On the relationship ...

North America. Journ. Meteor., vol. 15, No 1, 1958; P.E. Wosko, Pressure and Temperature Variations over the Centers of Typical Migratory Anti-cyclones. Bull. Amer. Met. Soc., vol. 35, No 1, 1954; F.T. Bodurtha, An investigation of anticyclogenesis in Alaska. Journ. Meteorol., vol. 9, No 2, 1952.

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D228/D302

3,1800

AUTHOR: Sazonov, B. I.

TITLE: An indicator for the degree of disturbance of the troposphere's baric field

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 4, 1962, 36-37, abstract 4B222 (Solnechnyye dannyye, no. 8, 1961, 67-70)

TEXT: The problem of establishing the solar-troposphere relations comes down to distinguishing the "signal", connected with the solar activity, from the "noise", on whose background it is displayed. It was found that the baric ridge developed over Alaska, like the ridge over West Europe, is related to the zone of the invasion of corpuscular flows into the atmosphere, i.e. to the zone of auroras. Moreover, the pressure in the vicinity of Alaska grows after strong chromospheric flares, and sudden rises in the temperature are often observed in the stratosphere, somewhat further to the north. All this indicates the substantial role of solar acti-

Card 1/3

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An indicator for ...

vity in the formation of a ridge in the north of the Pacific Ocean. The study of different indices, characterizing the development of the ridge over Alaska and allowing the degree of disturbance (the disturbance due to solar activity) to be estimated, led to the conclusion that it is expedient to introduce a new index. In the Pacific Ocean hemisphere of the earth (90°E - 90°W) datum points were taken at the intersection with meridians, in multiples of 10, at 50°, 55°, and 60°N; similar points were also taken at 65° and 70°N, at the intersection with the meridians, in multiples of 20. This survey grid was superimposed on the high-altitude baric field, and a reading was taken at each point. Four maximum readings were chosen from all those for each latitude, and their mean was calculated. Of such means, according to the number of latitudes, 5 were obtained for each day. Five corresponding means of the previous day were calculated from the five means for the next day, and all the positive differences were added up. The resulting magnitudes also represent a ridge development index, possessing a number of advantages: It is not related to a definite geographic

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area, it has no yearly variation, and it assumes no negative values. The sun's spottiness was calculated from the formula: $Sd = Sd_1 + 0.2\ Sd_2$. Here Sd_1 is the area of the spots in million parts of the area of the disc for the zone where $r/R \leqslant 0.35$, and Sd_2 is the area of the spots for the zone where $0.35 < r/R \leqslant 0.45$. The relation of these magnitudes can be traced well on the graph. [Abstracter's note: Complete translation.]

Card 3/3

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S/531/62/000/133/002/004
A052/A126

AUTHOR: Sazonov, B. I.

TITLE: On the theory of interaction of solar corpuscular flows with the Earth's atmosphere

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy. no. 133, 1962. Voprosy obshchey i sinopticheskoy klimatologii. 107 - 118

TEXT: On the basis of recent experimental data relating to the process taking place in the upper atmosphere, an explanation is given for a certain connection between intrusions of corpuscular particles into the ionosphere and the activation of tropospheric circulation (pressure field accentuation law). The solar corpuscular flow is considered as a factor capable of securing a redistribution of large air masses in the Earth's atmosphere. Proofs of the correctness of such a conception of the corpuscular flow are supplied. The author rejects the schemes of interaction of the upper and lower atmosphere and the schemes of the disturbance transfer from the ionosphere to the troposphere which consider the solar corpuscular flow as an agent capable of producing a considerable heat-

Card 1/4

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ing up of the ionosphere and a change of circulation. These schemes presume that the circulation, originated in the upper layers, will propagate downwards, the speed of the air will decrease in proportion with the increases of density, but the momentum will be constant in all altitudes of the atmosphere. Low densities in the ionosphere should be compensated by extremely high velocities. On the basis of theoretical considerations the author maintains that 1) the energy introduced into the atmosphere by corpuscular flows is negligeable compared with the energy of the ionosphere-troposphere circulation system; 2) hydrodynamic downward disturbance transfer is of no effect; just a negligeable part of disturbance energy is transferred to the atmosphere, whereas the main part remains in the upper layers. By its character this mechanism is rather fit for the dissipation of energy than for its concentrated transfer from one layer to another; 3) If the existence of an ideal disturbance transfer mechanism from ionosphere to troposphere is assumed, still the energy of a weak pressure formation in the troposphere would be higher by a factor of thousands than the energy introduced by a corpuscular flow into ionosphere. It means that the corpuscular flow should be considered not as a cause of any tropospheric disturbances, but as a stimulating factor contributing to the liberation of energy reserves available in the

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atmosphere. The author proposes another explanation based on the kinetic theory of gases, according to which the internal friction coefficient of gas does not depend on its density, but on the temperature and velocity of gas particles. This is connected with the fact that the internal friction coefficient is conditioned by a qualitative difference between colliding groups of particles. Notwithstanding the low densities of ionospheric gas it does not represent a "transparent" medium for the passing corpuscular flow, in particular in the lower ionosphere, where the layer with maximum kinematic air viscosity in the Earth's atmosphere is situated. Every 1 - 10 m a high-energy corpuscular particle will collide with a relatively stationary air particle giving the latter part of its energy. Air particles subjected to collisions will start moving in the same general direction as the high-energy particle. By moving they also will collide with other relatively stationary air particles setting them in motion. In the course of time the number of moving particles will increase, the mean velocity of the air flow will increase, and an ordered transfer of ionospheric air in the direction near to that of corpuscular particles will appear. The ionospheric air velocity will be the higher the higher the velocity and density of the incoming corpuscular flow and the longer this flow will act on ionospheric gas

Card 3/4

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particles. Another important phenomenon is that in the gaseous envelope of the Earth, in particular in its upper parts, any condensations once produced serve as centers of radiation air cooling. On account of the large number of collisions between molecules these condensations will radiate and condense more than the surrounding air layers. It means that every condensation must be self-sustaining and self-magnifying. The paper is published for discussion. There are 1 table and 1 figure.

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SAZONOV, B.I.

Some general characteristics of air movement in the troposphere and lower ionosphere. Trudy GGO no.133:119-126 '62.
(MIRA 16:2)

(Atmosphere) (Ionosphere)

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s/531/62/000/133/003/004
A052/A126

AUTHOR: Sazonov, B. I.

TITLE: On unsolved problems of interaction of upper and lower atmosphere layers

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 133, 1962. Voprosy obshchey i sinopticheskoy klimatologii. 127 - 136

TEXT: Proofs are given that the idea of air mass redistribution in the Earth's atmosphere conditioned by solar corpuscular flow, expressed in earlier studies of the author, is in good agreement with some known facts of synoptic meteorology. A number of problems is considered, the solution of which can be considerably facilitated, if the conception of air mass redistribution is accepted. In particular, a simple explanation will be found for the fact that the increase of pressure in tropospheric anticyclone is preceded in time by the increase of pressure in the lower stratosphere, and the decrease of pressure in tropospheric cyclone by the decrease of pressure in the lower stratosphere. The paper follows up the author's hypothesis that corpuscular flows entering the

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Earth's atmosphere can create gaseous condensations in it. The author does not claim a solution of problems unsolved by synoptic meteorology; he wants to point to the usefulness of his hypothesis in explaining some phenomena observed in the lower atmosphere. The first devices launched into atmosphere have shown that in anticyclones the air is warmer and more dry than the air in cyclones, that is the presence of vertical motions of various directions in regions of high and low pressure. On this fact was based the convection theory of pressure change. However, neither the authors of convection theory nor their followers could explain the cause of vertical motion. Later on attention was called to the fact that air temperature and density changes originated in the upper troposphere and propagated downward, and that the cooling in upper layers preceded the cyclone and thunderstorm development. These observations led to the stratospheric control theory. The leading part played by air-mass changes in pressure changes, and the part played by stratospheric control of tropospheric processes is most clearly revealed by analyzing the contributions made by density changes in individual atmosphere layers to near the Earth pressure changes. This analysis leads to the causes of air mass anomalies in the lower stratosphere and to the understanding of processes capable of securing air condensations and rarefactions in

Card 2/4

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On unsolved problems of interaction of...

the homogeneous Earth gravitation field. It is possible that, knowing time and place of the appearance of condensations or rarefactions in the lower strato - sphere, the appearance of anticyclones or cyclones in the troposphere could be predicted. Another unsolved problem of synoptic meteorology is the problem of cold peaks and warm troughs in the lower stratopshere in moderate latitudes, the most characteristic connection between temperature and pressure in the atmo- sphere. This connection is disturbed only over inversion layers. The probable explanation of this phenomenon is that all three layers have a common property of suppressing vertical motions. Air condensation created in the upper atmo- sphere moving downwards under action of Archimedes' forces will slow down its motion in all three layers. Radiating more energy than it receives from the adiabatic compression, the air condensation will create over the inversion layer a cold center over a certain area. At the same time the increase of air mass will lead here also to the increase of pressure. The problem of sudden warming up in the stratosphere has attracted attention recently. Sudden warmings are especially frequent over the north-east of Canada and the northern boundary of Siberia. In these regions anticyclones are especially frequent in the second half of the winter. Towards the end of March in connection with the appearance

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On unsolved problems of interaction of...

of large amounts of ozone in the polar stratosphere - with the warming of polar air in these altitudes - a pressure-field readjustment takes place in the stratosphere. The pole-equator pressure drop decreases to such a degree that air condensations can penetrate into subtropic latitudes. This mechanism seems to account for the fact that sudden warmings of the stratosphere are especially frequent in February and are not observed at the end of March. In conclusion the author specifies the laws which probably must be observed in the atmosphere. The paper is published for discussion. There is 1 table.

Card 4/4

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ACCESSION NR AM4042773 BOOK EXPLOITATION S/

Sazonov, Boris Ivanovich

High pressure formations and solar activity (Vysotnyye baricheskiye obrazovaniya i solnechnaya aktivnost'), Leningrad, Gidrometeoizdat, 1964, 129 p. illus., biblio., maps. Errata slip inserted. 1,500 copies printed. (At head of title: Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR. Glavnaya geofizicheskaya observatoriya im.

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The book is intended for specialists in
students and graduate students.

Card 1/2

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TABLE OF CONTENTS:

Ch. I. Introduction -- 3
Ch. II. A review of the history of research on the relationship between sun and troposphere -- 8
Ch. III. Anticyclonegenisis zone -- 29
Ch. IIII. Investigation of the anticyclonegenisis zone -- 39
Ch. V. Zone of the northern lights and the anticyclonegenisis zone -- 58
Ch. VI. Sun spots and accentuation of the high altitude pressure field -- 73
Ch. VII. The mechanism of transmission of solar activity into the troposphere -- 96
Ch. VIII. Conclusion -- 116
Bibliography -- 122

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Card 2/2

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ACCESSION NR: AP4047157 S/0033/64/041/005/0937/0941

B

AUTHOR: Gnevy*shev, M. N.; B. I. Sazonov

TITLE: Influence of solar activity on processes in the earth's lower atmosphere

SOURCE: Astronomicheskiy zhurnal, v. 41, no. 5, 1964, 937-941

TOPIC TAGS: solar activity, lower atmosphere, solar corpuscular radiation, pressure formation, corona, meteorology

ABSTRACT: The development of active processes on the sun is accompanied by the emission of solar ultraviolet radiation, corpuscular radiation and emission in the radio range. These radiations, upon reaching the earth's atmosphere, cause changes in it which are manifested most strongly in the upper layers of the atmosphere at heights greater than [illegible] is less pronounced. The studies

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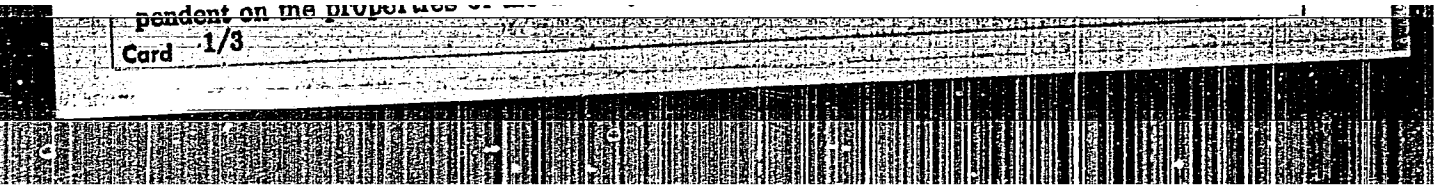

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position and initial conditions, causing the effect of solar activity to be manifested differently in different regions; 2) in most cases, these authors have used indices of solar activity (such as Wolf numbers or sunspot area) which are nonlinearly related to the values of the energy of that solar radiation which is of importance for processes in the earth's lower atmosphere. This article is essentially a synopsis of certain arguments which demonstrate the influence of solar activity on the lower atmosphere, presented earlier by the authors (B. I. Sazonov, Vy*sotny*ye baricheskiye obrazovaniya i solnechnaya aktivnost', Gidrometeoizdat, 1964; M. N. Gnevy*shev, Astron zh., 40, 401-412, 1963). In the first of these studies, on the basis of an analysis of 12,000 high-level pressure charts of the northern hemisphere, Sazonov drew important conclusions concerning the occurrence of regions with the most frequent extreme deviations of pressure from the norm. It was found that the regions of maximum frequency of maximum pressure form a ring-like zone similar to the auroral zone; a similar ring-like zone is formed for extremely low pressure values. It was shown that with the passage of large spot groups across the sun's central meridian there is a pressure increase in the pressure formations of the first zone and a pressure decrease in the second. It is concluded that this is evidence that the agent stimulating the development of pressure formations in the stratosphere and upper troposphere is solar corpuscular radiation, whose distribution is determined by the earth's magnetic field. The reaction of the lower atmosphere will have a different sign, depending on the region. Although this region is defined clearly in the

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stratosphere and upper troposphere, it becomes much less clearly defined in the lower layers due to the influence of the thermal, mechanical and radiation peculiarities of the underlying surface. The essence of Gnevy*shev's paper was that the behavior of the coronal line λ 6303 demonstrates that solar activity is linked closely to changes in the earth's lower atmosphere. The distribution of pressure formations in the 11-year solar cycle has two maxima which coincide with the intensity maximum of this coronal line. The behavior of both the line and the pressure formations is determined by solar corpuscular radiation. Orig. art. has: 2 figures.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya, AN SSSR (Main Astronomical Observatory, AN SSSR); Glavnaya geofizicheskaya observatoriya imeni A. I. Voyeykova (Main Geophysical Observatory)

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SAZONOV, B.I.

The sun--troposphere relationship. Astron. zhur. 42 no.3:653-655 My-Je '65. (MIRA 18:5)

1. Glavnaya geofizicheskaya observatoriya im. A.I.Voykova.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001447510016-2

ACC NR: AT6021086 SOURCE CODE: UR/2531/66/000/198/0107/0115

AUTHOR: Sazonov, B. I.

ORG: None

TITLE: Perturbation of the baric field as a geophysical index

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 198, 1966. Voprosy obshchey i sinopticheskoy klimatologii (Problems in general and synoptic climatology) 107-115

TOPIC TAGS: climatology, atmospheric circulation, atmospheric circulation index, troposphere solar influence

ABSTRACT: This paper is concerned with connections between solar and tropospheric processes. The author, in a search for an effective index for the elucidation of latitude features in the general atmospheric circulation, presents a critical review of the various existing circulation indices and outlines his reasoning leading to the proposal of an index based upon perturbation intensity of the atmospheric pressure field. More specifically, he defines this index of baric perturbation, a measure of the atmospheric deviation from its normal state, as one based upon the number of isobaric lines intersecting a given latitude line, according to the expression:

$$B = \sum_{i=1}^{N} \left[(n_n - 1) - (n_s - 1) \right] \qquad (1)$$

Card 1/2

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where N is the number of anticyclones or cyclones, n_n - the number of latitude intersections by the isobaric lines from the North, and n_s - the number of latitude intersections from the South. On the basis of an evaluation supported by statistical data between 1959 and 1962, it is shown that the proposed index permits the determination of latitude features and relations with the latitude on and of the general atmospheric circulation, which has a decisive significance for the discovery of the mechanism of the connections between the Sun and the troposphere.

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SAZONOV, B.R., inzh.

BKZ-210-140 FB boiler unit. Teploenergetika 6 no.1:91-92 Ja '59. (MIRA 12:1)

(Boilers)

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ACC NR: AP6025232 SOURCE CODE: UR/0104/66/000/006/0029/0035

AUTHOR: Sazanov, B. V. (Candidate of technical sciences); Myagkov, A. A. (Engineer)

ORG: none

TITLE: Calculating the power indices of steam-gas installations

SOURCE: Elektricheskiye stantsii, no. 6, 1966, 29-35

TOPIC TAGS: gas turbine, steam turbine, gas fuel, fuel thermal stability

ABSTRACT: A method is proposed for analyzing fuel economy in steam-gas installations with conventional and high-pressure steam generators. Fuel economy in steam-gas units is the result of two approximately equivalent factors: operating the gas cycle at a higher temperature than the steam cycle; reducing losses while the heat from the fuel is being transferred to the working sections of the power cycles (reducing the total amount of escaping gases):

$$\frac{G_t}{P_t} \quad \frac{G_g \quad G_s}{P_g \quad P_s}$$

where G is the rate of flow of escaping gas and P is power, the indices t, g, and s indicating total, gas turbine and steam turbine respectively. The method proposed in this paper accounts for both of these sources of fuel economy and may be used for determining the optimum conditions for a gas-turbine installation. The method is used to analyze some of the power indices of a gas-turbine installation with a conventional steam generator. Orig. art. has: 6 figures, 9 formulas, and 3 tables. [JPRS: 36,741]

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SAZONOV, D. I.

14(10) SOV/99-59-6-13/13

AUTHOR: Sharov, N.A., Engineer

TITLE: Conference on Problems of Crop Irrigation Mechanization in the USSR

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 6, pp 61-64. (USSR)

ABSTRACT: The article describes the Conference on Problems of Crop Irrigation Mechanization in the USSR called by the Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii sel'skogo khozyaystva (All-Union Research Institute of Agriculture Mechanization) and held in Moscow from March 18 to 21, 1959. The conference was dedicated to problems of sprinkling. The following organizations were represented in it: research institutes, water economy corporations, institutions of higher learning, special design offices, planning organizations, industrial enterprises from the Ukhek, Ukrainian, Azerbaydzhan, Georgian, Kirgiz, Kazakh, Turkmen, and the Moldavian SSR, the RSFSR, as well as the Gosudarstvennyy Nauchno-tekhnicheskiy komitet pri Sovete Ministrov SSSR (State Scientific and Technical Committee Attached to the Ministers Council of the USSR), the Giprovodkhoz, and the Ministerstvo sel'skogo khozyaystva SSSR (Ministry of Agriculture of the USSR). In all, the conference was attended by more than 100 specialists and representatives of at least 53 organizations. The conference had its past developments summed up and made several decisions to promote irrigation mechanization. The following reports were delivered there: A.V. Krasnichenko, Director of the VISKhOM, made an introductory speech; G.P. Nechetov, Senior Engineer of the Upravleniye novoy tekhniki i tayy-tsiya mashin MSKh SSSR (New Equipment and Machinery

Card 1/4

Testing Administration of the MSKh USSR), lectured on "Present-Day Condition and Work Outlook for the Creation of New Sprinklers"; Candidate of Technical Sciences B.N. Yebedev, VISKhOM, - on his institute's laboratory work; Candidate of Technical Sciences S.Kh.Gusayn-Zade, Representative of the AzNIIGiM, - on sprinkling in the Azerbaydzhan SSR; Candidate of Technical Sciences V.I. Kal'nitskiy, GruzNIIGiM, - on sprinkling in the Georgian SSR; Kh.I. Ryskov, Manager of the Irrigation Engineering Section of the Moskovskaya oblastnaya doldevel'skaya stantsiya (Moscow Station for Testing and Sprinkling Research), - on sprinkling in the Moskovskaya Oblast'; V.I. Bordanovich, Senior Scientific Worker of the UkrNIIGiM, - on sprinkling in the Ukraine; V.P. Yitts, Senior Scientific Worker

Card 2/4

Card 3/4

and Representative of the YuzhNIIGiM, - on sprinkling mechanization; A.M. Korzagin, Scientific Worker of the Institut sel'skogo khozyaystva imeni Dokuchayeva (Institute of Agriculture imeni Dokuchayev), -on a mobile sprinkling system in the Central Chernozem Zone; D.I. Sazonov, Chief Agronomist of the Magnitogorskiy molochno-ovoshchnyy sovkhoz (Magnitogorsk Milk and Vegetable-Growing Sovkhoz), - on on sprinkling vegetables and potatoes in Southern Ural; Engineer-Hydrotechnician F.M. Yur'yev - on sprinkling cotton at the Sovkhoz "Pakhta-Kal", with an expedition of the SANIIRI doing appraisal work.

ASSOCIATION: Glavodkhoz MSKh SSSR

Card 4/4

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SAZONOV, D.M.; FROLOV, N.Ya.

Electromagnetic excitation of a spherical radially stratified medium. Zhur. tekh. fiz. 35 no.6:990-995 Je '65. (MIRA 18:7)

1. Moskovskiy energeticheskiy institut.

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